

FS 57.(amended) The kit of claim 41, wherein the first and the second isolated nucleic acid molecules are constructed and arranged to selectively amplify at least a portion of an isolated nucleic acid molecule comprising SEQ ID NO:38, wherein the portion of SEQ ID NO:38 is at least 24 nucleotides in length.

58.(amended) The kit of claim 43, wherein the first and the second isolated nucleic acid molecules are constructed and arranged to selectively amplify at least a portion of an isolated nucleic acid molecule comprising SEQ ID NO:43, wherein the portion of SEQ ID NO:43 is at least 24 nucleotides in length.

Remarks

Applicants thank the Examiner for reconsidering and withdrawing several of the prior claim rejections.

Regarding the pending rejections, claims 9, 40, 41, 57 and 58 have been amended to clarify the claim language. Support for the amendment to claims 9, 41, 57 and 58 can be found in the specification at page 8, lines 12-18 (supporting amplification using nonoverlapping 12-32 nucleotide contiguous segments of SEQ ID NOs:38); page 14, lines 28-30 (supporting nucleic acid fragments of 24 nucleotides or more); page 17, lines 22 and 32 (supporting protein fragments of 8 amino acids); and in the claims in the recitation of the amplification of portions of certain sequences. A portion of a nucleic acid molecule amplified by nonoverlapping primers of 12 nucleotides is 24 nonoverlapping nucleotides (12 from the 5' primer and 12 from the 3' primer when juxtaposed head to head for amplification). This amplified fragment of a nucleic acid molecule would encode an 8 amino acid fragment of a polypeptide, as claimed. No new matter has been added.

Support for the amendment to claim 40 can be found in the specification at page 14, at lines 21-24: "Unique fragments further can be used as antisense molecules to inhibit the expression of SAGE or sdp3.5 tumor associated nucleic acids and polypeptides, particularly for therapeutic purposes as described in greater detail below." This passage describes the use of antisense oligonucleotides "particularly for therapeutic purposes," thereby suggesting the use for non-therapeutic. No new matter has been added.

Claim 1 has been amended to clarify that the claimed nucleic acid molecules include those that hybridize to and or degenerates of nucleotides 119-1831 of SEQ ID NO:38. This clarification is supported in the specification at page 4, line 27, page 12, lines 27-28, page 51, lines 16-18, and in the Sequence Listing which shows the open reading frame of SEQ ID NO:38 corresponds to the recited range of nucleotides. No new matter has been added.

Rejections Under 35 U.S.C. 112, First Paragraph

The Examiner rejected claim 40 under 35 U.S.C. 112, first paragraph as not enabled. Applicants have amended claim 40 to limit the claim to *in vitro* uses. *In vitro* use of antisense is well known to one of ordinary skill in the art, and can be practiced with routine experimentation by the skilled artisan. Applicants accordingly respectfully request reconsideration of the rejection of claim 40.

Rejections Under 35 U.S.C. 112, Second Paragraph

The Examiner rejected claims 9, 41, 57 and 58 under 35 U.S.C. 112, second paragraph as indefinite for the use of the phrase "at least a portion." Applicants have amended the claims to recite the meaning of the claim term "portion".

Claims 9 and 41 recited a portion of an amino acid sequence. These claims were amended to specify that the portion is at least 8 amino acids in length, which represents the smallest portion of an amino acid sequence that can be amplified by two nonoverlapping primers of at least 12 nucleotides each (the amplification product of such a reaction is a 24 nucleotide molecule, which encodes 8 amino acids). Similarly, claims 57 and 58 were amended to recite that the amplified portion of the claimed nucleotide sequences is at least 24 nucleotides in length, which represents the smallest portion of a nucleotide sequence that can be amplified by two nonoverlapping primers that have at least 12 nucleotides each.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejections made under 35 U.S.C. 112, second paragraph.

Rejections Under 35 U.S.C. 102

The Examiner rejected claims 1, 9, 18 and 19 as anticipated by US patent 5,880,102. The '102 patent discloses a sequence that is part of a vector; this vector sequence or an identical sequence apparently was included as a part of the 5' noncoding end of SEQ ID NO:38.


Applicants have amended claim 1 to limit the sequences related to SEQ ID NO:38 to those in the coding region. Thus claim 1 recites nucleic acid molecules that hybridize to, or are degenerates of, the coding region (open reading frame) of SEQ ID NO:38 (i.e., nucleotides 119-1831) and complements thereof.

Applicants traverse the rejection of claim 9. Claim 9 clearly requires that the fragment of SEQ ID NO:38 "encodes a portion of SEQ ID NO:39." The sequence disclosed in the '102 patent does not encode any portion of SEQ ID NO:39, as it matches part of the 5' noncoding region of SEQ ID NO:38. Therefore, the sequence disclosed in the '102 patent does not anticipate the claimed invention.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections made under 35 U.S.C. 102.

Applicants respectfully request consideration of the claims in view of the amendments and reasoned statements made above. If the Examiner wishes to advance the prosecution in any way, then the Examiner is invited to telephone the undersigned at the telephone number listed below.

Respectfully submitted,


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